

OHIO-CINCINNATI PROFILE

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Hot Issues – Water and Ohio River

Issue: Ohio River Water Quality Trading Pilot – Cincinnati

Background/Status: On March 11, EPA will participate in a ceremony marking the first purchase of water quality trading credits for a pilot program on the Ohio River. The event centers on the purchase of nutrient (phosphorus and nitrogen) pollution credits by three point sources from nonpoint sources using part of a \$1.2 million EPA Targeted Watershed Grant for the transaction. In 2008, EPA awarded the grant to the Electric Power and Research Institute for implementing a water-quality trading program on the Ohio River. EPRI has used a portion of the funds to install nonpoint source Best Management Practices in the states of Indiana, Kentucky and Ohio, and develop a system to buy and sell nutrient pollution credits. The pilot program began in 2012 and will run through 2015.

It is important to note that the three point sources do not have numeric effluent limits for nutrient pollution in their National Pollutant Discharge Elimination System permits. In the short-term, the pilot program will make sure a system is in place to register credits through the exchange, that nonpoint source credits are verified, and that the trading documentation is credible. The long-term plan is for the states to issue NPDES permits with numeric effluent limits so the trading program can be self-sufficient and reduce nutrient pollution loads in the Ohio River Basin and, ultimately, to the Gulf of Mexico.

Messages:

- The purchase of nutrient pollution credits is a major milestone for the pilot Ohio River water-quality trading program, which is the first large interstate program of its kind.
- EPA supports water quality trading for its potential to reduce nutrient pollution from point and nonpoint sources at a lower overall cost.
- EPA Region 5 is working with the states of Indiana and Ohio to create long-term success of the Ohio River trading program.

Contact: George Azevedo, R5 Water, 312-886-0143, azevedo.george@epa.gov

Issue: Ohio Proposes Unique Criterion for Excessive Nutrients – Statewide

Background/Status: To protect aquatic life uses of rivers and streams from adverse effects of

excessive nutrients, Ohio developed the Trophic Index Criterion. The index is a multi-metric

scoring system for assessing and controlling cultural eutrophication. The TIC incorporates data from four separate water-quality indicators, including biological health, dissolved oxygen levels, benthic chlorophyll and nutrient concentrations. The TIC assigns different weights to each indicator with the greatest weight given to the criteria that are most directly suggestive of aquatic life support or nonattainment. As a result, the indicators for biological health receive the greatest

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weight, followed by dissolved oxygen, benthic chlorophyll and then nutrient levels. Where the TIC indicates that aquatic life uses of a stream are either impaired or threatened, nutrients are managed to restore ambient nutrient concentrations to levels below the targets derived by Ohio EPA from the relationships observed using Ohio field data. Ohio EPA and a technical advisory group comprised of Ohio stakeholders is currently working on developing draft rules that Ohio EPA will propose. EPA is not a member of the advisory group, but provides input and support as requested.

Messages:

- EPA worked extensively with Ohio in the development of the state's water quality index and supports the innovative proposal.

Contact: David Pfeifer, R5 Water, 312-353-9024, pfeifer.david@epa.gov

Issue: Sierra Club Petitions Ohio EPA for More Bacteria Monitoring – Statewide

Background/Status: Ohio EPA recently public noticed its draft 2014 Integrated Report on impaired waters. This week, Sierra Club members in Ohio sent more than 1,300 comments to the Ohio EPA asking for additional bacteriological (*E. coli*) monitoring on Ohio's streams and rivers. According to Sierra Club, Ohio's draft 2014 Integrated Report states that Ohio EPA has not assessed 60 percent of Ohio's large rivers and 60 percent of Ohio's inland streams for compliance with recreational standards for *E. coli*. Sierra Club has asked EPA to take this issue seriously and advise the Ohio EPA on how best they can manage Ohio's *E. coli* problem.

Messages:

- EPA has not responded to Sierra Club's request to advise Ohio EPA on expanding *E. coli* monitoring for rivers and streams.
- EPA staff will be talking with Ohio EPA about Sierra Club's request.
- Ohio supplements federal Section 106 monitoring funds with more than \$6 million in state funds annually to monitor the state's waters.

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Issue: West Virginia Chemical Spill Reaches the Ohio River – S. Ohio

Background/Status: The January 2014 spill of 4-Methylcyclohexane Methanol into the Elk River in West Virginia caused concern beyond Charleston, West Virginia. The plume traveled down the Elk River into the Kanawha River and then to the Ohio River. The Ohio River Sanitation Commission used river modeling to forecast times that the plume would arrive at downstream locations. They also monitored the plume concentration at various monitoring stations along the Ohio River. Concentrations of MCHM were below 0.5 mg/L by the time the plume reached the Ohio River and only became more diluted as it traveled downstream. There was some concern from the public about this chemical with a low odor threshold and for which there was little health data.

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For the public water systems using the Ohio River as their source water:

- Ironton, Ohio, stored as much water as it could and shut down their intake as the plume passed by.
- Portsmouth, Ohio, did not make any changes to its operations as officials believed their treatment would take care of the very low MCHM levels.
- Cincinnati shut down its intake as a precaution – the city has 60 hours of storage in its system.

Messages:

- The MCHM plume was well below the health advisory levels by the time it reached the Ohio River.
- Ohio River Valley Water Sanitation Commission monitored the concentration of MCHM in the Ohio River at its monitoring locations.
- EPA did not conduct MCHM monitoring in the Ohio River because ORSANCO was already monitoring and the concentrations were already below the health advisory.

Contact: Thomas Poy, R5 Water, 312-886-5991, poy.thomas@epa.gov

Issue: Ohio River Bacteria TMDL – S. Ohio

Background/Status: EPA Regions 3, 4 and 5 are working with the Ohio River Valley Water Sanitation Commission, the six states adjacent to the river (IL, IN, OH, PA, WV, KY), and an EPA contractor to develop Total Maximum Daily Loads for bacteria for the entire Ohio River, which is 981 miles long. Recreational use is impaired for about two-thirds of the river (approximately 630 miles). The latest activity is modeling in cooperation with the Army Corps of Engineers. The Corps uses a special model daily to simulate the river hydraulics and hydrology for navigation and operation of the locks and dams. Water-quality data has been fed into the model, including combined sewer overflow control plans from the urban areas and communities along the river. The model will help develop the TMDL for use in 2015.

Messages:

- EPA is committed along with Ohio River authorities, the six Ohio River states and the Army Corps of Engineers to develop bacteria limits for the Ohio River and protect the health of residents.
- A Total Maximum Daily Load for bacteria is expected to be completed in 2015.

Contact: Jean Chruscicki, R5 Water, 312-353-1435, chruscicki.jean@epa.gov

Issue: Sewer Consent Decree – Hamilton County/City of Cincinnati

Background/Status: Hamilton County and the city of Cincinnati are implementing measures under the June 2004 federal consent decrees with EPA, Ohio EPA, and the Ohio River Valley Water Sanitation Commission to manage CSO and SSO issues. In 2013, EPA/OEPA/ORSANCO agreed to an innovative, sustainable, and integrated watershed solution for the Lower Mill Creek

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area in lieu of a deep tunnel to deal with some of the defendants' worst CSOs. The plan will achieve the same or better environmental results at a lower cost. The interim partial remedy for the Lower Mill Creek area includes the creation of a green corridor that will separate rainwater from the combined sewer system and manage the rainwater in a vegetated channel in a disadvantaged community area. The green solutions are more cost-effective than the "grey infrastructure" solution originally planned and are saving money for local ratepayers. The parties also expect the green corridor to contribute to neighborhood stabilization and economic revitalization in the project area.

EPA/OEPA/ORSANCO met at the defendants' Cincinnati offices in late January, to discuss project updates. In addition, the parties discussed the possibility of making further modifications to the plan of work for other watersheds in order to incorporate the lessons learned during the negotiations of the Lower Mill Creek Partial Remedy.

Messages:

- EPA is committed to enforcing the Clean Water Act and reducing sewer overflows to protect the health of Cincinnati-area residents.
- EPA is working with Hamilton County and Cincinnati in finding ways to achieve equivalent or better environmental results at lower cost by using so-called green infrastructure.

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Related Issue: Lick Run Watershed/South Fairmount – Cincinnati

Background/Status: The Lick Run Watershed is a focus area for Metropolitan Sewer District's effort to incorporate both gray and green infrastructure, rather than conventional underground tunnels, to meet its combined sewer overflow management needs in a way that improves the community. Region 5 community based efforts extend beyond regulatory compliance by working across EPA programs to implement projects on community development, climate change, land banking, demolition, job training, and Brownfields revitalization. Recent highlights include:

- **Greener Demolition Practices** – EPA R5 assisted in developing deconstruction and salvage strategies for the 75 residential structures which will be removed in the South Fairmount neighborhood as preparation for construction of large-scale green infrastructure.
 - Region 5 webinar on February 26 highlighted the deconstruction efforts and job training by Cincinnati Metropolitan Sewer District and Building Value. Link to [video](#).
- **Leveraging Federal Partners** – In January 2013, HUD DOT EPA Deputies and Regional Administrators held a roundtable on Partnership for Sustainable Communities projects in Cincinnati.
- **Redevelop Brownfields** – EPA Brownfields program assistance was used to design the green stormwater solution and identify properties for future redevelopment. Link to

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Brownfields [video](#).

Messages:

- Green infrastructure solutions can provide multiple social, environmental and economic benefits when coordinated with other revitalization efforts.
- EPA Region 5 is actively working with the City of Cincinnati on tasks associated with neighborhood revitalization that will be implemented alongside the green infrastructure investments to the Lick Run Watershed.
- EPA continues to leverage the investments of federal, state, and local partners.

Contacts: Jon Grosshans, R5 Superfund, 312-353-5617, Grosshans.jon@epa.gov; Bob Newport R5 Water, 312-886-1513, newport.bob@epa.gov

Hot Issues – Cincinnati Area

Issue: Climate Showcase Communities Grants in Cincinnati

Background/Status: The City of Cincinnati received a Climate Showcase Communities grant to reduce greenhouse gas emissions through replicable projects that also improve environmental, economic, public health, or social conditions in a community. Under this grant, Cincinnati implemented a marketing campaign for the Green Cincinnati Plan, focusing on the residential and commercial sectors, and integrating climate change awareness into Cincinnati public schools. The “What’s Your Green Umbrella?” campaign (through its website, TV/radio ads, and public events) encourages residents and businesses to pledge and track actions to reduce their carbon footprint. This grant is near completion.

Message:

- EPA Region 5 is working with the City of Cincinnati to reduce greenhouse gas emissions and realize associated economic co-benefits through reduced energy costs and improved efficiency.

Contact: Melissa Hulting (ARD), 312-886-2265, hulting.melissa@epa.gov; Erin Newman, (ARD), 312-886-4587, newman.erin@epa.gov

Issue: Brent Spence Bridge Expansion – Cincinnati

Background/Status: This existing bridge carries Interstates 71 and 75 across the Ohio River between downtown Cincinnati and suburbs in northern Kentucky. The expansion project will add capacity and deal with traffic safety, congestion, and design problems through construction of a second bridge span and modification of adjacent roads and ramps. The project is controversial because of issues such as noise, relocations of homes and businesses, potential

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impacts to industrial redevelopment areas and environmental justice communities, and cost (estimated cost of the preferred alternative is \$3 billion). EPA (Regions 4 and 5) commented on the Draft Environmental Assessment in May 2012, raising concerns with stormwater management, noise, and environmental justice. Those comments were largely answered. The Environmental Assessment will be re-evaluated this spring to consider the impacts of adding tolls to this bridge. The first phase of construction will begin in 2015.

Message:

- EPA commented on the Draft Environmental Assessment in May 2012, raising concerns with stormwater management, noise, and environmental justice. Those comments were largely answered to EPA's satisfaction.

Contacts: Norman West, OECA, 312-353-5692, west.norman@epa.gov; Ken Westlake, OECA, 312-886-2910

Issue: Eastern Corridor Multi-Modal Transportation Project – Cincinnati

Background/Status: This project would enhance transportation capacity in the corridor between downtown Cincinnati and growing eastern suburbs in Hamilton and Clermont counties through highway realignments and a light rail line (the "Oasis Line."). A Tier 1 Record of Decision by the Federal Highway Administration was issued in 2006 but is being re-evaluated by federal and state transportation authorities. One Tier 1 project, the reconstruction of the I-275/Ohio 32 interchange, is under construction.

The public process for Tier 2 began in early 2012. In Tier 2, the transportation agencies will select final alignments for the highway and transit line and locations of stations and interchanges. The corridor's proposed crossing of the Little Miami River, a National Wild and Scenic River, is controversial with the National Park Service and the public. Challenging topography, a major landfill, existing urban development, and an extensive archaeological resource area add complexity to this project. The Ohio Department of Transportation has engaged the U.S. Institute for Environmental Conflict Resolution to assist with the project. A Tier 2 Draft Environmental Impact Statement is not expected to be issued until 2015 at the earliest. U.S. EPA will review and comment on it at that time.

Message:

- EPA will comment on the environmental issues associated with this proposed transportation corridor when a draft environmental impact statement is released in 2015 or later.

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Hot Issues – Statewide

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Issue: Public Requests to Suspend State Underground Injection Program – Statewide

Background/Status: Since March 2013, EPA has received many letters and emails asking the Agency to suspend and review the Ohio Department of Natural Resources' "Class II" program for regulating underground injection of wastewater that is generated during oil and gas extraction. The letters come from the Center for Health, Environment and Justice, the Sierra Club, the Athens County Fracking Action Network, and the Buckeye Forest Council, as well as many individuals. The organizations and individuals allege underground injection is not properly regulated by ODNR, citing earthquakes near Youngstown in 2011, an unpermitted brine discharge in 2013, also near Youngstown, and non-specific effects at other wells. Many emails, especially those from Athens County residents, link concerns about potential drinking water contamination from deep well brine disposal to concerns about hydraulic fracturing for oil and gas development overall. Lastly, some citizens perceive a conflict between ODNR's dual charge of promoting and regulating oil development and waste disposal, citing recent news coverage of the Ohio administration's role in an internal ODNR communication strategy about drilling in state parks.

Class II underground injection control wells in Ohio have been subject to state requirements since 1983 when U.S. EPA delegated the program to Ohio. EPA's 2009 review of the Ohio Class II program found it was operated in accordance with the EPA-Ohio primacy agreements.

Message:

- EPA is reviewing the Ohio underground injection well program as part of the regular state oversight process and expects to complete the evaluation by the end of 2014.

Contact: Anna Miller, R5 Water, (312) 886-7060, miller.anna@epa.gov

Issue: Transfer of CAFO Program to Ohio Department of Agriculture – Statewide

Background/Status: EPA received Ohio's request to allow the Ohio Department of Agriculture to administer the National Pollutant Discharge Elimination System program for concentrated animal feeding operations in 2007. The Ohio Environmental Protection Agency currently manages the program. U.S. EPA notified the public that it proposed to approve the ODA program in 2008. The approval was contingent on Ohio adopting specific rule and law changes for CAFOs.

Since 2009, Ohio has finalized some rule and statute changes. EPA is currently reviewing a recent statutory revision that would give ODA sufficient authority to pursue criminal penalties concerning the CAFO program. ODA also needs to make appropriate revisions to the Memorandum of Understanding between ODA and OEPA and submit a revised Ohio Attorney General's statement. Once U.S. EPA agrees this work is completed, it is expected Ohio will re-submit to EPA its request to transfer the NPDES program for CAFOs from Ohio EPA to ODA.

Message:

- EPA has been working with the Ohio Agriculture Department on the necessary statutory

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changes to make sure the Ohio agency has the ability as well as the legal authority to administer the Clean Water Act and protect Ohio's streams and rivers.

Contact: Kathleen Kowal, R5 Water, 312-353-5206, kowal.kathleen@epa.gov

Issue: Asbestos and the Demolition of Abandoned and Foreclosed Homes –Statewide

Background/Status: It is estimated there are at least 100,000 residential structures in Ohio that require immediate demolition. The Ohio Attorney General's office has implemented a "Moving Ohio Forward Demolition Grant Program" using \$75 million of a \$330 million dollar settlement Ohio has received as a participant in litigation with mortgage servicers. Under the grants, a large number of demolitions are already taking place throughout much of Ohio.

The cost to inspect homes for asbestos and to abate asbestos can be a significant portion of the total demolition cost. In a few instances, community and land bank representatives disagree with EPA about how EPA interprets its asbestos regulations as they apply to the demolition of vacant homes. Because the funds for demolition are limited, money spent on asbestos reduces the number of demolitions that can be completed.

In 2012, representatives from Ohio cities and land banks sought assistance from Senators Sherrod Brown and Rob Portman as well Representatives Steven C. LaTourette and Marcia L. Fudge. Senator Portman has asked EPA to work with the Ohio EPA and local interested parties to reassess the impact of EPA's asbestos regulations on local land banks and communities. Congresswoman Kaptur's staff met with EPA staff to discuss the issue of residential demolitions. Region 5 participated in conference calls with Senator Brown's staff and representatives of land banks and communities in Ohio. Region 5 has also met with Ohio EPA and the Ohio Attorney General's office to discuss possible resolutions to this issue.

In 2012, Ohio EPA submitted a proposal that would treat the demolition of single family homes differently than they are currently treated under the asbestos NESHAP. EPA had previously informed Ohio EPA of serious concerns about elements of a technical support document it had submitted in advance of its proposal. EPA has informed Ohio EPA that its proposal does not resolve our concerns. More recently Ohio EPA has begun the process of altering its state asbestos regulations to make it easier to grant relief from asbestos regulatory requirements to cities and land banks.

Message:

- Regulated pollutants that pose a risk to the public, such as asbestos, are present in many abandoned homes. Unregulated pollutants including lead, mercury, and household hazardous wastes, are also present. The failure to properly deal with these pollutants can render sites undesirable or unusable for redevelopment.
- EPA Region 5 has a number of efforts underway, including the development of a Web page and model green demolition bid specifications, to help communities deal with this problem.
- EPA is committed to ensuring the critical health standards for asbestos are met, standards

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that protect people from possible exposure to asbestos that can cause significant health problems, like lung cancer and mesothelioma, while reducing the barriers to redevelopment. As part of this process, we are working with Congressional representatives, cities and counties, land banks, state governments and other interested people to identify opportunities to advance these efforts.

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